

Date: Sat, 5 Mar 94 04:30:26 PST  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V94 #55  
To: Ham-Ant

Ham-Ant Digest Sat, 5 Mar 94 Volume 94 : Issue 55

## Today's Topics:

Antennas for Scanners: further thoughts  
Antennas for scanners?  
Getting Coax Seal OFF? (2 msgs)  
MFJ SWR Analyzers  
Question on the copper tube J-pole (copper cactus)  
Re: 2m Groundplane Antenna Question

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 4 Mar 94 16:43:09 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Antennas for Scanners: further thoughts  
To: ham-ant@ucsd.edu

>From:  
>ihnp4.ucsd.edu!swrinde!cs.utexas.edu!csc.ti.com!tilde.csc.ti.com!skopen.dseg.ti  
>.com!sc04!jmyers@network.ucsd.edu  
>Subject: Antennas for scanners?  
>To: ham-ant@ucsd.edu  
>  
>I've had really good luck with a discone. About 18" diameter disc on a 18"  
>cone with good  
>old rg-58 (foam insulation) for the feedline. Any good wideband antenna  
>design should work.  
>I put a neon (ne-2) bulb at the feed point for static and lightening  
>protection along with

>a good ground strap and ground rod. It's about 30' from my 40m yagi.  
>Regards.

I've also used a Discone ("WD4BUM" model, about \$36.00) on my AR 1000. It works well on freqs. below about 70 mhz and above about 165 mhz. There is severe overloading between 70 and 165 from what sound like FM Broadcast stations. I didn't get any overloading when I tried the Discone at my inlaw's farm in rural western PA. In addition, maybe my radio is more prone to overloading and "intermod" than yours. Overall though, I think the results will depend on your location, If you're in a relatively "quiet" area, you probably won't get much overloading. BTW, anybody have some recs. for scanners with fewer overloading problems?

Now, before we start getting posts about the inappropriateness of scanner posts on this discussion list, I'd like to add that the discone also works very well with my 2 meter HT and base rig. SWR with the HT is about 1.2-4.

'73 Mark KA3LFG

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Date: 2 Mar 1994 16:04:28 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!eff!  
news.kei.com!bloom-beacon.mit.edu!senator-bedfellow.mit.edu!  
sarahman@network.ucsd.edu  
Subject: Antennas for scanners?  
To: ham-ant@ucsd.edu

Hello. Let me admit right away that I know nothing! I have a pro 2006 scanner (25Mhz-1300Mhz) and was wondering what types of antennas are best for this kind of application? I am hoping to mount the antenna on the roof of the building at about 20 metres up, say. Thanks in advance for any information or references!

Sabbir.

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Date: 28 Feb 94 17:26:58 GMT  
From: nprdc!ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!  
howland.reston.ans.net!usenet.ins.cwru.edu!nigel.msen.com!ilium!rcsun.a.gmr.com!  
kocrsv01!c2xjcb@network.ucsd.edu  
Subject: Getting Coax Seal OFF?  
To: ham-ant@ucsd.edu

In article <2kjnai\$1if8@st6000.sct.edu>, msmit@sc.edu (Matt Smith) writes:  
>

> >Can anyone suggest a decent method for taking Coax Seal \*off\* of a  
> connector? It's a mess, and I'm not sure how to do it.  
>  
> Well, the ideal thing to do would be to put electrical tape on the connector  
> \_BEFORE\_ you put the coax seal on, but since that's too late... The hasty  
> option would be to cut the connector off and put on a new one. If you want  
> to save the connector then just get off whatever you can then use the ball  
> of that to get the rest off. I hope that Coax Seal is similar to the tar or  
> roll of really sticky black or beige stuff that most people use. (Also  
> referred to as "Ickum-pucky" (don't ask me)) Otherwise, cut off the  
> connector.

I've never tried this, but at it's worst it means that you'll lobe-off  
the connector (which is what you were going to do anyway) . . .

Try your standard, run-of-the-mill, \$1.29/12oz can "Carburetor  
Cleaner" spray (Gunk, STP, etc.) . . . it is great at dissolving tarry  
stuff. 1st get off as much of the Ickum-pucky as possible, then spray  
on the carb cleaner; let it sit a while, then wipe-off with a trashy  
cloth rag. Repeat until all traces are removed.

The only worry I have is if it will bother the coax jacket any. If it  
does, then get your wire-cutter out, other wise you're done.

BTW:

Carb cleaner spray beats ANY commercial insecticide spray (like Raid,  
etc.) for INSTANTLY killing bees and wasps. I had a wasp bothering me  
in the garage once; it laughed at the "Raid Flying Insect" spray I  
blasted at him. He landed on the window, I sprayed him with carb  
cleaner, and he instantly fell to the floor begging me not to stomp on  
him (sorry Charlie!). But I digress . . .

--

James C. Bach                    Ph: (317)-451-0455            The views & opinions expressed  
Advanced Project Engr.        GM-NET: 8-322-0455            herein are mine alone, and are  
Powertrain Strategy Grp      Amateur Radio: WY9F            NOT endorsed, sponsored, nor  
Delco Electronics Corp.       Just say NO to UNIX!            encouraged by DE or GM.

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Date: 2 Mar 94 21:01:16 GMT

From: nprdc!ihnp4.ucsd.edu!sdd.hp.com!math.ohio-state.edu!howland.reston.ans.net!  
gatech!swrinde!sgiblab!wrdis02.robins.af.mil!apollo.robins.af.mil!  
woodj@network.ucsd.edu  
Subject: Getting Coax Seal OFF?  
To: ham-ant@ucsd.edu

In article <ericr.762116748@access3>, ericr@access3.digex.net (Eric Rosenberg)

writes:

>

> Can anyone suggest a decent method for taking Coax Seal \*off\* of a  
> connector? It's a mess, and I'm not sure how to do it.

>

> Please email your responses...

>

> Thanks --

> Eric

>

>

> --

> Eric Rosenberg                           WD3Q, EI4VPS, ZL0ADG, J20BY, etc.  
> 338 14th Street, NE                       voice: +202-547-3441  
> Washington, DC 20002 USA               fax:   +202-547-3613  
> ericr@access.digex.com                 wd3q@amsat.org

>

I think WD40(tm) will cut it. I don't know what would be a good cleaner  
to remove the WD40...                   Jim KA4GHX

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Date: 3 Mar 1994 21:59:19 GMT  
From: ihnp4.ucsd.edu!swrinde!sgiblab!sgigate.sgi.com!olivea!inews.intel.com!scdt!  
dbraun@network.ucsd.edu  
Subject: MFJ SWR Analyzers  
To: ham-ant@ucsd.edu

In article <1994Mar1.162350.22173@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary  
Coffman) writes:

|> No. This only works if the antenna feed point impedance approaches  
|> the characteristic impedance of the coax most closely at resonance.  
|> That's roughly true for dipoles, but not for some other types of  
|> antennas. For example, a 1/4-wave monopole has a feed point impedance  
|> at resonance of about 36 ohms. At either side of resonance, the  
|> impedance (complex) increases. So there are two points where the  
|> impedance will be closer to 50 ohms than the resonant point.

Although the impedance may be closer to 50 ohms, the SWR will  
INCREASE. Adding reactive impedance to a resistive load  
will NEVER decrease the SWR. Although the total impedance value  
may be closer to 50 ohms, the reactive-ness will just make the SWR worse.  
Stare at a Smith chart, and you will see this.

Intuitively, the only way to decrease the SWR is to increase the  
amount of power that is adsorbed by the load resistance. Adding

reactance in series with the resistance can only decrease the voltage that the resistance sees, and reduce the power it is adsorbing.

-

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```
        / decwrl \
        | hplabs |
or maybe: -| oliveb |- !intelca!mipos3!cadenv6!dbraun
        | amd   |
        \ qantel /
```

"There is no human problem which could not be solved if people would simply do as I advise." -- Gore Vidal

Date: 1 Mar 94 15:28:10 GMT

From: ncrgw2.ncr.com!ncrhubb!tdbunews!nsc32!wps@uunet.uu.net  
Subject: Question on the copper tube J-pole (copper cactus)  
To: ham-ant@ucsd.edu

UIs this antenna omni-direction with equal strength or does it favor one direction. If it favors one direction, which way is it? I don't have an antenna book to check this and our local library is still not open after the Jan earthquake.

example: To transmit hitting a repeater with the best possible signal,  
which way should the antenna be oriented and should it be  
vertical or  
leaning at an angle?

if the repeater is in this direction

- - - - - >

what is the best orientation ?

tnx - 73's

Bill

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Bill Starkgraf                    wps@ElSegundoCA.ncr.com  
AT&T Global Information Solutions    (310) 524-5754  
El Segundo, CA                    (800) 222-6245 x5754

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Call: KD6UQB                    Simi Settlers ARC  
                                  Simi Valley, CA

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Date: Fri, 4 Mar 1994 00:01:46 GMT  
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!news.dtc.hp.com!hplextra!hpcss01!  
markb@network.ucsd.edu  
Subject: Re: 2m Groundplane Antenna Question  
To: ham-ant@ucsd.edu

I believe alot of designs call for 45 degrees down, this gets you  
very close to 50 ohms I believe

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End of Ham-Ant Digest V94 #55  
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